

WIRELESS CONTROLLER WITH GATEWAY**ABSTRACT**

Remote control of energy consumption is realized using a readily
5 installable, flexible approach. According to an example embodiment of the present
invention, a remote source communicates with a wireless controller for executing energy
usage control. The remote source sends signals to the wireless controller via a gateway
located near or, in one implementation, forming part of the wireless controller. In
response to the signals, the wireless controller sets control settings for operating one or
10 more of a variety of equipment types, such as a furnace, air conditioner, water heater or
heat pump. With this approach, wired connections from the gateway to energy-
consuming equipment do not necessarily need to be made in order to effect remote
energy-consumption control. For instance, when used in connection with a controller
wired to the energy-consuming equipment, the gateway need only communicate
15 wirelessly with the controller and does not necessarily need to be coupled to the energy-
consuming equipment. In addition, access to the energy-consuming equipment for
establishing remote energy control is not necessary; rather, the remote energy control can
be effected by accessing user-friendly locations, such as those where thermostats and
other controllers are typically located.